

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for wireless transmission of data by a sensor unit of a sensor via a communication unit to a base station, ~~wherein the communication unit~~ the method comprising the following sequence:

a) ~~receives~~ the communication unit receiving a wake-up signal ~~for~~ from the sensor unit,

b) ~~transfers~~ the communication unit transferring from a sleep mode into an active mode,

c) the communication unit switching on a receiver of the communication unit,

d) the communication unit awaiting reception of a modulated synchronization signal of the base station,

e) the communication unit sending a modulated data signal to the base station following a prescribed time after reception of the modulated synchronization signal,

~~e) sends a modulated data signal to the base station,~~

~~d) awaits the~~ f) the communication unit awaiting reception of a modulated acknowledgement signal from the base station,

~~e) transfers from~~ g) the communication unit transferring from the active mode to the sleep mode in the case of the reception of the modulated acknowledgement signal from the base station, and

~~and wherein the communication unit~~

~~f) sends~~ h) the communication unit sending a modulated data signal again in the case of no reception of the modulated acknowledgement signal and ~~continues~~ continuing in accordance with ~~step d)~~ step f).

~~and wherein the communication unit sends the modulated data signal in step e) by virtue of the fact that the communication unit switches on a receiver of the communication unit, awaits the reception of a modulated synchronization signal, and sends the modulated data signal following a prescribed time after reception of the modulated synchronization signal.~~

2. (Currently Amended) The method as claimed in claim 1, wherein the communication unit sends the modulated data signal in step e) e) in a time window that is determined with the aid of an internal clock.

3. (Previously Presented) The method as claimed in claim 1, wherein, in the case of a reception of a modulated data signal in a first time window, the base station sends a single modulated acknowledgement signal in a second time window following the first.

4. (Currently Amended) The method as claimed in claim 1, wherein, after the reception of modulated data signals of a plurality of sensors, the base station sends, one after another, modulated acknowledgement signals assigned to these sensors ~~without there being data signals between the acknowledgement signals.~~

5. (Previously Presented) The method as claimed in claim 1, wherein modulated data signals and modulated acknowledgement signals are transmitted on different carrier frequencies.

6. (Previously Presented) The method as claimed in claim 1, wherein the communication unit receives the wake-up signal and a data signal from a proximity sensor, in particular from a proximity switch.

7. (Previously Presented) The method as claimed in claim 6, wherein the sensor unit operates on the basis of a capacitive, inductive or photoelectric operating principle or a Hall effect, or on the basis of ultrasound.

8. (Previously Presented) A device for wireless transmission of data from a sensor unit via a communication unit to a base station, the communication unit having a receiver for receiving a modulated synchronization signal and for receiving a modulated acknowledgement signal, and a transmitter for sending a modulated data signal, and the receiver and the transmitter both having an active mode and a sleep mode, the device having a sleep unit for switching over the mode of the receiver and transmitter in accordance with a wake-up signal from the sensor unit, and of an acknowledgement signal from the receiver, wherein the transmitter has means for repeatedly sending a modulated data signal in accordance with a negative acknowledgement signal from the receiver, and the receiver has means for awaiting reception of a modulated synchronization signal after reception of the wake-up signal

of the sensor unit, and for generating a synchronization signal for the purpose of temporal synchronization of the modulated data signal.

9. (Previously Presented) The device as claimed in claim 8, wherein the device is assigned a prescribed time delay between the reception of the modulated synchronization signal and the sending of the modulated data signal.

10. (Previously Presented) The device as claimed in claim 8, wherein the sensor unit is a proximity sensor or a proximity switch.